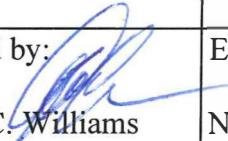


CITY OF MILLBRAE		
ADMINISTRATIVE STANDARD PROCEDURES	Number: 4-9-5	Page 1 of 5
Subject: Municipal Zero Waste Policy	Approved by:  Thomas C. Williams City Manager	Effective Date: November 30, 2020

## I. PURPOSE

The purpose of this policy is to increase municipal efforts to reduce, reuse, recycle, and compost waste to reduce the amount of waste from municipal buildings ending up in the landfill. The intent of this policy is to provide clear goals and describe new programs that will allow the City to reach its zero waste diversion goals in City operations by 2030.

The benefits of implementing a Municipal Zero Waste Policy include reducing greenhouse gases and our impact on climate change; saving money and resources through reduced garbage bills; educating and empowering employees to contribute to improving our environment; and continuing to lead by example by taking actions to reduce the ecological footprint of City facilities and enhance the environmental sustainability of our community.

## II. POLICY

### Overview and Goals

“Zero waste” means sending very little waste to landfill by increasing efforts to reduce, reuse, recycle, and compost. In addition, it also involves Extended Producer Responsibility (EPR), in which manufacturers take responsibility for end-of-life management of their products, such as electronics manufacturers taking back their products and packaging for recycling and reuse, and design products that are reusable, non-toxic, and less wasteful.

The City of Millbrae’s Climate Action Plan (CAP) includes a combination of State and City measures aimed at reducing communitywide greenhouse gas emissions (GHG) by 49% by 2030 from the base year 2005, and for waste/garbage specifically, by 51% below 2005 levels by 2030. The CAP outlines a number of measures to help support sustainable resources management and landfill diversion. Diversion is the process of keeping waste out of landfills by recycling and source reduction. CAP Measure 37, Landfill Diversion Rate Goal, aims to increase participation in community recycling programs and weekly collection of recyclables and organic waste to achieve 85% diversion. CAP Measure 42, the Municipal Zero Waste Policy, aims to achieve 95% diversion in City operations by 2030. The measures included in this policy are in line with the CAP.

The estimated diversion rates for municipal facilities and sites as outlined in Table 1 were estimated from a waste analysis based on: 2019 invoices from South San Francisco Scavenger Company, Inc. (SSF Scavenger), Republic Services, Zarc Recycling, and Circosta Iron & Metal Co. Inc.; the 2019 Annual Report from Synagro Biosolids Management; electronic waste reporting from Stepford, Inc., the City’s Information Technology contractor; and information from City staff.

The 2030 diversion goal rates differ per site based on the analysis done and on current diversion rates and activities that take place at each site. The Aviador Storage Yard has a much lower diversion rate than other sites, estimated at 16%, partially because waste from street sweeping and illegal dumping are dropped off there, along with non-recyclable waste from the Utilities and Operations Division. Due to the varied activities at the facilities, the sites have different diversion goals. These goals can be re-evaluated if circumstances change.

**Table 1: 2019 Estimated Diversion Rates for Municipal Sites\***

Site	Estimated Annual Diverted Waste (tons)	Estimated Annual Trash (tons)	Est. Annual Total Waste (Diverted Waste + Trash)	Est. Diversion Rate (Diverted Waste / All Waste)	2030 Zero Waste Diversion Goal
<b>City Hall / Civic Center Buildings (City Hall, Civic Center, Library, Chetcuti Room, Rec. Center, Police Dept.)**</b>	81.5	6.8	88.3	92%	<b>95%</b>
<b>Corporation Yard</b>	18.5	14.3	32.8	56%	<b>75%</b>
<b>Aviador Storage Yard***</b>	110.0	566.5	676.5	16%	<b>50%</b>
<b>Treatment Plant</b>	306.1	33.3	339.3	90%	<b>90%</b>
<b>Main Fire Station #37</b>	16.6	28.6	45.2	37%	<b>65%</b>
<b>Fire Station #38</b>	6.2	3.4	9.6	65%	<b>85%</b>

\*For a complete analysis of waste at all sites, *Waste Analysis of All Municipal Sites 2019* [Microsoft Excel spreadsheet] is available for review.

\*\*Includes waste from rentals of City facilities, Library events, and other community events held in City facilities.

\*\*\*Includes waste from street sweeping and illegal dumping. Assuming 30% of total annual trash is illegal dumping, Estimated Annual Trash would decrease to 396.6 tons and % Diverted would increase to 22%.

See Attachment 1 – Diversion Calculation and Data Collection for information on how the data in Table 1 was collected and calculated.

To achieve these diversion goals, programs will be developed to expand current efforts for reducing waste and increasing participation in municipal recycling programs. The City will work with South San Francisco Scavenger to identify other materials that may be recycled. In addition, staff has updated the City's Administrative Standard Procedures for the Environmental Policy to incorporate more elements of zero waste, including the addition of Environmentally Preferred Purchasing Guidelines. Finally, efforts will be made to partner with other zero waste and sustainability proponents to pursue and advocate for EPR as described above.

## **State Requirements**

AB 939, AB 341, AB 1826, SB 1383 and related legislation require that all cities and counties in California reduce the amount of solid waste placed in landfills and reduce greenhouse gases. Since 1995, Millbrae has achieved and surpassed State waste diversion goals. Currently, the City is allowed up to 5.3 pounds per person a day (PPD), and achieved 2.9 PPD for reporting year 2019.

## **Current Municipal Waste Prevention and Recycling Programs**

The City currently conducts waste prevention and recycling programs for residents, businesses, schools, and City departments and facilities to provide opportunities to reduce, reuse, recycle, compost, and buy recycled products. The City also conducts programs aimed at reducing the amount of household hazardous waste that is used and disposed of in landfills and to educate users on alternative options.

The City has comprehensive waste prevention and recycling programs in place for City Hall, the Library, Millbrae Police Bureau, Fire Stations, the Community Center, the Treatment Plant, the Public Works Operations Center, and the Aviador Storage Yard. These programs are detailed below.

## **Priority Actions to Achieve Municipal Zero Waste by 2030**

### **Current Zero Waste Programs:**

- Recycling mixed paper, cardboard, containers (cans/bottles), metal, asphalt, cement, bricks, dirt, and other recyclable materials as identified by departments and divisions (see *City Recycling Guide* and *Corporation Storage Yard Recycling Guide*), and the toxic/hazardous waste items listed under “Toxics Reduction” in the City’s Administrative Standard Procedures for the Environmental Policy;
- Recycling special materials, including electronic waste (computers, cell phones, digital cameras, CDs, DVDs, video and audio tapes, diskettes, etc.), fluorescent light bulbs, household batteries, expanded polystyrene (Styrofoam®) peanuts and packaging, and plastic film;
- Composting landscape trimmings and food scraps/organics;
- Reducing paper use by double-sided copying and printing, adjusting margins, using both sides of paper, utilizing print preview, and using electronic documents when possible;
- Reuse envelopes, packaging, single-sided documents as scrap paper, and other office items;
- Recycle or auction surplus items according to City regulations (Administrative Standard Procedure #4-13):
  - All vehicles and some equipment are auctioned;
  - Equipment not sold by auction is scrapped, such as metal equipment for recycling;
- Certifying City Hall and the Millbrae Library as Green Businesses;
- Purchasing recycled content paper and office supplies, including:
  - Copy paper with 100% post-consumer recycled content;
  - Other office products such as business cards, letterhead, and envelopes with no less than a minimum of 50% post-consumer recycled content when possible, and when not possible, no less than 30% post-consumer recycled content;
  - Custodial paper products with no less than 50% post-consumer recycled content when possible, and when not possible, no less than 30% post-consumer recycled content;

- Creating a Green Team comprised of staff from every department, who help to implement environmental measures in their departments, including increasing recycling, reducing paper, conserving energy and water, and more;
- Continuing to require recycling and compost collection for City facility rentals, and for events held at parks and street fairs.

#### **New or Expanded Zero Waste Programs:**

- **Expand Recycling, Composting, and Reuse Programs at All City Facilities.**
  - Periodically review the current programs in place, including accepted materials/recyclables, receptacles, signage, and collection data to identify where facilities can add and/or expand recycling, composting, repair, waste prevention, and reuse programs.
  - Expand reuse measures where possible for office supplies such as envelopes and packaging, furniture, and equipment.
  - Implement food waste prevention measures, including donating edible food to organizations from City facility rentals, and amend rental contracts to incorporate these measures.
- **Adopt the Disposable Food Service Ware Ordinance.**
  - Replace the Sustainable Food Service Ware Ordinance with the County of San Mateo's Disposable Food Service Ware Ordinance. This ordinance requires that all food ware is compostable, and will apply to City departments, facilities, and facility rentals.
  - Amend rental contracts for City facilities to incorporate the amended food ware ordinance.
  - Limit disposable food service ware and encourage reusable food service ware for plates, cups, and utensils.
- **Conduct More Frequent and Focused Outreach on Illegal Dumping and Littering.**
  - Given the high rates of illegal dumping and littering, (as evidenced by the amount of trash collected at the Aviador Storage Yard via illegal dumping and street sweeping,) more frequent and targeted outreach will be conducted to decrease illegal dumping and littering behaviors in Millbrae.
  - Conduct focused outreach to multifamily buildings regarding how to properly recycle or dispose of unwanted furniture, appliances, mattresses, and other large items.
  - Provide educational materials to new building permit applicants and local businesses about littering.
- **Certify Additional Municipal Buildings as Green Businesses.**
  - City Hall and the Millbrae Library were certified in 2008, 2013, and 2019.
  - Certify the Public Works Operations Center and the new Community Center by 2022.
  - Continue Green Business certification when facility renewals are due.
- **Follow the Environmentally Preferred Purchasing Guidelines.**
  - The City's Administrative Standard Procedures for its Environmental Policy (4-9-4) includes the Environmentally Preferred Purchasing Guidelines.
  - These Guidelines encourage purchasing products and services with high environmental performance and from manufacturers and suppliers that demonstrate a high level of environmental and social responsibility.

- This includes purchasing and using recycled paper products and recycled and organic products, minimally as required by SB 1383, as well as other areas of sustainable purchasing, including products such as building and landscaping materials, electronics, and additional office supplies.
- Items should be purchased that have minimal, recyclable, or no packaging.
- **Work with Custodial Staff to Help Ensure Proper Recycling.**
  - Continue on-going education with custodians.
  - The current custodial contract includes recycling and compost collection as well as use of non-toxic cleaning supplies.
  - Future contracts may include incentives and disincentives to help ensure proper placement in outside containers.
  - Custodial staff will be encouraged to inform Environmental Programs if additional recycling containers are needed in offices/departments.
- **Continue and Expand Staff Outreach & Education.**
  - The Environmental Programs staff will continue to conduct education and outreach to City employees regarding zero waste programs and practices, including providing waste reduction and recycling guides to staff and posting signs and notices on related topics.
  - Regular outreach to staff will include proper sorting by City staff (such as through above methods and notifications of contamination).
  - The Human Resources Division will provide new employees with the City Department Recycling Guide and Administrative Standard Procedures for the Environmental Policy, including the Environmentally Preferred Purchasing Guidelines.
  - Continue the internal Green Team program, including:
    - Promoting campaigns on environmental topics. Previous topics included a paper reduction campaign and an energy saving campaign.
    - Holding departmental informational events.

### **III. RESPONSIBILITIES**

It is the responsibility of City Department Heads, Superintendents, Supervisors, and Managers to ensure procedures are followed for the programs implemented.

### **IV. EFFECTIVE DATE**

November 30, 2020

Attachment:  
Attachment 1 – Diversion Calculation and Data Collection



**For each site, diversion was calculated using the following formula:**

$$\text{Diversion \%} = (\text{recycling} + \text{compost}) / (\text{recycling} + \text{compost} + \text{trash}) \times 100$$

**Data Collection Information per Site:**

- 1. City Hall/Civic Center Buildings, the Corporation Yard, and the Fire Stations**
  - a. Type, number, size, and frequency of collection of trash, recycling, and compost containers were gathered from SSF Scavenger monthly 2019 invoices.
  - b. Type and number of electronic items (computer, monitors, and printers) estimated to be collected from City Hall/Civic Center Buildings and the Corporation Yard for recycling at Tri-Valley Recycling was gathered from Stepford, Inc.
  - c. Based on this data, EPA Volume-to-Weight Conversion Factors<sup>1</sup> were used to estimate annual tons of trash, recycling, and compost.
  - d. City Hall/Civic Center Buildings data includes waste from rentals of City facilities, Library events, and other community events held in City facilities.
- 2. Aviador Storage Yard**
  - a. Type, number, size, and weight in tons of trash and green waste containers were gathered from SSF Scavenger monthly invoices detailing 2019 service. This included waste from street sweeping and illegal dumping.
  - b. Type and volume of asphalt/concrete/mixed aggregate, greenwaste/woodwaste, and yard waste/compost were gathered from Ox Mountain Landfill 2019 invoices.
    - i. Based on this data from Ox Mountain Landfill, EPA Volume-to-Weight Conversion Factors<sup>1</sup> were used to estimate annual tons of trash (note that all materials brought to Ox Mountain Landfill were confirmed to go to landfill, not recycled.)
  - c. Weight in pounds of steel/iron/sheet metal was gathered from an invoice from Circosta Iron & Metal Co. Inc.
  - d. Weight in pounds of iron/yellow brass 95% and #2 copper was gathered from an invoice from Zarc Recycling.
- 3. Treatment Plant**
  - a. Type, number, size, and frequency of collection of trash, recycling, and compost containers were gathered from SSF Scavenger monthly 2019 invoices.
  - b. Based on this data, EPA Volume-to-Weight Conversion Factors<sup>1</sup> were used to estimate annual tons of trash, recycling, and compost.
  - c. Weight in tons of biosolids was gathered from the 2019 Annual Report from Synagro Biosolids Management. This was added to the recycling and compost data as diverted waste.

---

<sup>1</sup> U.S. Environmental Protection Agency Office of Resource Conservation and Recovery, *Volume-to-Weight Conversion Factors*, 2016, [https://www.epa.gov/sites/production/files/2016-04/documents/volume\\_to\\_weight\\_conversion\\_factors\\_memorandum\\_04192016\\_508fnl.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf), (accessed August 26, 2020).